



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/810,299

03/26/2004

Christian Bleys

Serie 6155

9269

7590
Linda K. Russell
Air Liquide
Suite 1800
2700 Post Oak Blvd.
Houston, TX 77056

11/12/2008

EXAMINER

PATEL, NIHIR B

ART UNIT

PAPER NUMBER

3772

MAIL DATE

DELIVERY MODE

11/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 11, 14, 17-20, 22-31 and 33-40 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **11, 17, 18, 20, 22, 30, 31, 35 and 38** are rejected under 35 U.S.C. 102(b) as being anticipated by Sasso, Jr. (US 5,603,315).

4. **As to claims 11 and 30**, Sasso teaches an apparatus that comprises a source of compressed gas **2 (see figure 1; col. 4 lines 20-40)**, wherein the compressed gas source is equipped with a gas pressure reducing valve **4 (see figure 1; col. 4 lines 20-50)**, device to control the flowrate and the pressure of the gas issuing from the compressed gas source (**see col. 4 lines 20-50**); a respiratory assistance ventilator fed with gas by the compressed gas source (**see col. 4 lines 20-50**); and a man/machine **8 (see col. 4 lines 40-60)** cooperating with the gas ventilator so as to permit regulation of at least one ventilation parameter and at least one ventilation set-point (**see col. 4 lines 34-60**), wherein the gas pressure reducing valve device comprises an outlet connector to which the respiratory assistance ventilator is fixed (**see col. 4 lines 20-50**), wherein the respiratory assistance ventilator comprises an internal gas circuit

Art Unit: 3772

forming a fluidic connection from an inlet orifice connected to the low pressure outlet connector of the pressure reducing valve to an outlet orifice through which the gas is delivered to a patient circuit (**see figure 1; col. 4 lines 20-67**), and a proportional valve being arranged on the internal circuit to regulate the proportion of gas delivered to the patient circuit, the valve being controlled by means cooperating with the man/machine interface (**see col. 4 and col. 5**), wherein the respiratory assistance ventilator further comprises a flow rate sensor **20** (**see figure 1; col. 4 lines 65-67**) and a pressure sensor (**see abstract**) for measuring the flow rate and the pressure of the gas in the internal circuit, the sensors cooperating with the control means in such a way as to permit automatic control and regulation of the proportional valve in terms of flow rate or pressure, wherein the man/machine interface comprises means for regulating a ventilation set point or parameter in order to permit selection and regulation of at least one ventilation parameter or at least one ventilation set point; and wherein the pressure reducing valve device, the respiratory assistance ventilator, and the man/machine interface cooperating with the ventilator form a compact system supported by the compressed gas source (**see col. 2 lines 64-67**).

5. **As to claim 17**, Sasso teaches an apparatus that further comprises display means cooperating with the regulating means in order to make it possible to visualize and display at least one value of at least one ventilation parameter or at least one ventilation set point that has been selected and regulated (**see col. 5 lines 50-65**).

6. **As to claims 18 and 35**, Sasso teaches an apparatus that further comprises a patient circuit with at least one gas conduit connected, via its upstream end, to the outlet orifice of the ventilator and, via its downstream end, to a respirator mask (**see figure 1**).

Art Unit: 3772

7. **As to claim 20**, Sasso teaches an apparatus wherein the means for regulating a ventilation set-point or parameter permit selection and regulation of at least one ventilation parameter or of at least one ventilation set point are selected from the group consisting of ventilation frequency; ventilation flow rate; ventilation volume; composition of the gas mixture; inhalation trigger threshold; inhalation time; exhalation time; inhalation time and exhalation time; ration of inhalation time and exhalation time; positive expiratory pressure (PEP); ventilation mode; and maximum safety pressure (**see col. 5 lines 1-25**).

8. **As to claims 22 and 38**, Sasso teaches an apparatus wherein the compact system is supported by an oxygen cylinder (**see figure 1; col. 4 lines 20-40**).

9. **As to claim 31**, Sasso teaches an a method of providing emergency ventilation to a patient comprising treating the patient with oxygen, wherein the oxygen is provided using a portable assembly (**see col. 2 lines 64-67 and col. 4 lines 20-40**).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 3772

2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
12. Claim **29** is rejected under 35 U.S.C. 103(a) as being unpatentable over Sasso, Jr. (US 5,603,315).
13. **As to claim 29**, Sasso substantially discloses a method steps of providing emergency ventilation to a patient comprising treating the patient with oxygen, wherein the oxygen is provided using a portable assembly (**see col. 2 lines 64-67**) comprising a source of compressed gas **2** (**see figure 1; col. 4 lines 20-40**), wherein the compressed gas source is equipped with a gas pressure reducing valve device **4** (**see figure 1; col. 4 lines 20-40**) to control the flow rate and the pressure of the gas issuing from the compressed gas source; a respiratory assistance ventilator fed with gas by the compressed gas source (**see col. 4 and col. 5**); and a man/machine interface cooperating with the ventilator so as to permit regulation of at least one ventilation parameter and at least one ventilation set point (**see col. 5**).

The method steps would have been obvious because they would have resulted from the use of the device of Sasso.

14. Claims **23, 24 and 39** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasso, Jr. (US 5,603,315).
15. **As to claims 23, 24 and 39**, Sasso substantially discloses the claimed invention; see rejection of claims 11 and 30 above, but does not disclose an apparatus that has a total weight of less than 25/15 kg. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sasso's invention by clearly stating that the apparatus has a

Art Unit: 3772

total weight of less than 25/15 kg in order to provide the patient with significantly more freedom to travel, since it has been held that discovering an optimum valve of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

16. Claims **19, 27, 28 and 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasso, Jr. (US 5,603,315) in view of Russel, Sr. et al. (US 5,099,837).

17. **As to claims 19, 27, 28 and 36**, Sasso substantially discloses an apparatus that comprises a source of compressed gas **2 (see figure 1; col. 4 lines 20-40)**, wherein the compressed gas source is equipped with a gas pressure reducing valve **4 (see figure 1; col. 4 lines 20-50)**, device to control the flowrate and the pressure of the gas issuing from the compressed gas source (**see col. 4 lines 20-50**); a respiratory assistance ventilator fed with gas by the compressed gas source (**see col. 4 lines 20-50**); and a man/machine **8 (see col. 4 lines 40-60)** cooperating with the gas ventilator so as to permit regulation of at least one ventilation parameter and at least one ventilation set-point (**see col. 4 lines 34-60**), wherein the gas pressure reducing valve device comprises an outlet connector to which the respiratory assistance ventilator is fixed (**see col. 4 lines 20-50**), wherein the respiratory assistance ventilator comprises an internal gas circuit forming a fluidic connection from an inlet orifice connected to the low pressure outlet connector of the pressure reducing valve to an outlet orifice through which the gas is delivered to a patient circuit (**see figure 1; col. 4 lines 20-67**), and a proportional valve being arranged on the internal circuit to regulate the proportion of gas delivered to the patient circuit, the valve being controlled by means cooperating with the man/machine interface (**see col. 4 and col. 5**), wherein the man/machine interface comprises means for regulating a ventilation set point or parameter in

Art Unit: 3772

order to permit selection and regulation of at least one ventilation parameter or at least one ventilation set point; and wherein the pressure reducing valve device, the respiratory assistance ventilator, and the man/machine interface cooperating with the ventilator form a compact system supported by the compressed gas source **(see col. 2 lines 64-67)**; wherein the compact system is supported by an oxygen cylinder **(see figure 1; col. 4 lines 20-40)** but does not disclose the pressure reducing valve and the ventilator being protected by a protective hood fixed on the compressed gas source. Russel discloses an apparatus that does disclose the pressure reducing valve and the ventilator being protected by a protective hood fixed on the compressed gas source **(Russel discloses an inhalation based control of medical gas that comprises an apparatus 22 which comprises a two component housing 26 (front component) which is mated to component 28; the combination of front housing component and mating component define the hood)**. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Sasso's invention by providing a pressure reducing valve and a ventilator that is protected by a protective hood fixed on the compressed gas source as taught by Russel so that it will not get damaged.

18. Claims **25, 26 and 40** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasso, Jr. (US 5,603,315) in view of Dubois et al. (US 6,520,176).

19. **As to claims 25, 26 and 40**, Sasso substantially discloses the claimed invention; see rejection of claims 11 and 30 above, but does not disclose carrier arrangement that is selected from the group consisting of backpack; harness; and any similar carrying means. Dubois substantially discloses an apparatus that does provide carrier arrangement that is selected from

Art Unit: 3772

the group consisting of backpack; harness; and any similar carrying means (**see figure 5**).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention as made to modify Sasso's invention by providing carrier arrangement that is selected from the group consisting of backpack; harness; and any similar carrying means as taught by Dubois in order to provide the patient with significantly more freedom to travel.

20. Claims **14, 33, 34 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasso, Jr. (US 5,603,315) in view of Gravenstein et al. (US 4,702,241).

21. **As to claims 14 and 33**, Sasso substantially discloses the claimed invention; see rejection of claims 11 and 30 above, but does not disclose a venturi injector arranged on the internal circuit. Gravenstein teaches an apparatus that does provide a venturi injector arranged on the internal circuit (**see figure 4**). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention made to modify Sasso's invention by providing a venturi injector arranged on the internal circuit as taught by Gravenstein in order to have better control of the gas being delivered.

22. **As to claim 34**, Sasso substantially discloses an apparatus that further comprises display means cooperating with the regulating means in order to make it possible to visualize and display at least one value of at least one ventilation parameter or at least one ventilation set point that has been selected and regulated (**see col. 5 lines 50-65**).

23. **As to claim 37**, Sasso substantially discloses an apparatus wherein the means for regulating a ventilation set-point or parameter permit selection and regulation of at least one ventilation parameter or of at least one ventilation set point are selected from the group

Art Unit: 3772

consisting of ventilation frequency; ventilation flow rate; ventilation volume; composition of the gas mixture; inhalation trigger threshold; inhalation time; exhalation time; inhalation time and exhalation time; ration of inhalation time and exhalation time; positive expiratory pressure (PEP); ventilation mode; and maximum safety pressure (**see col. 5 lines 1-25**).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIHIR PATEL whose telephone number is (571)272-4803. The examiner can normally be reached on 7:30 to 4:30 every other Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571) 272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3772

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Nihir Patel/
Examiner, Art Unit 3772

/Patricia Bianco/

Supervisory Patent Examiner, Art Unit 3772